

FREQUENTLY ASKED QUESTIONS FOR OFF-SYSTEM BRIDGE LOAD RATING

All bridge structures on public access roads in Louisiana are required to have a valid load rating. A load rating is a basis for determining the safe structural load capacity of a bridge to carry standard live loads that are common to both Louisiana and the US. Below is a series of frequently asked questions for the load rating of locally owned roadway bridges, commonly referred to as off-system bridges.

1. Who should I contact for information about load rating off system bridges?

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2. What programs/software are required to rate bridges?

AASHTOWare Bridge Design/Rating (BrD/R) program is required by Louisiana DOTD. Other approved programs are listed on the LADOTD/Bridge Design website (below) to be used to support the load ratings.

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/default.aspx

3. Does DOTD allow access to the AASHTOWare BrD/R program, or am I required to purchase the software, and how?

Yes, the AASHTOWare BrD/R Special Consultant/Agency Option is available to bridge owners (parishes, municipalities, etc.) and consultants who are providing load rating services for these owners through the LADOTD parent contract. Contact the LADOTD Off

System Bridge Rating Engineer (DOTD-Off-System-Rating@la.gov) for more details on obtaining the software.

<https://www.aashtoware.org/products/bridge/bridge-overview/>

4. What requirements/methods are used to load rate a bridge?

Requirements to load rate bridges are found in the AASHTO Manual for Bridge Evaluation (MBE) and the LADOTD Bridge Design and Evaluation Manual (BDEM), Part II, Volume 5. The LADOTD BDEM is available on the LADOTD/Bridge Design website.

5. The LADOTD BDEM is available on the LADOTD/Bridge Design website.

5. What documents are required to be submitted with the load rating?

A load rating report shall be submitted in accordance with the BDEM, which will include (but not limited to) a title page, Load Rating Summary Sheet, bridge description and assumptions, site map, calculations, etc.

6. Who and where should I send Load Ratings once completed?

Consultants should submit final load ratings to the Parish representative. The Parish representative will send all records to their respective LADOTD District Bridge Engineer, who will forward all load ratings to LADOTD to the DOTD Off System Bridge Rating Engineer for review (See Off-system Bridge Program Procedures for Submitting Load Rating). The submitting email is: DOTD-Off-System-Rating@la.gov.

7. Can load ratings be assigned?

Yes, in accordance the requirements of FHWA memorandum, “*Action: Assigned Load Ratings*”, dated September 29, 2011. This reference is also made in section 6.1.4 of the BDEM.

8. What do I do when I cannot find plans for a bridge?

A list of procedures titled “Locating Bridge Plans” are established to assist in finding plans and what to do if plans are not available.

9. How can I tell if a bridge matches a standard plan, or if a standard plan was used?

Field measurements of the components that make up the bridge structure are necessary to compare with the large number of standards used by the LADOTD. Sketches have been created to help the collection of these field measurements and are available at bridge website (Cross Sectional Measurements 1-Slab Bridge, Cross Sectional Measurements 2 - Girder Bridge).

10. Are ratings available for standard plans used on bridges? How are they obtained?

Yes, some of the standards have been load rated. Contact the LADOTD Off System Bridge Rating Engineer Group for assistance.

11. How can I obtain bridge inspection reports?

The LADOTD Bridge Maintenance section should be contacted (see link below) to obtain bridge inspection reports.

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/operations/bridgemaintenance/Pages/default.aspx

12. What is required if a bridge is being planned to be replaced through owner funding?

Report to the DOTD District Bridge Engineer as soon a bridge is scheduled to be replaced. However, a valid load rating is still required for the original bridge.

13. How precast box culverts, concrete pipe, and metal pipe will be handled? Who will take the measurement and do the rating?

For Precast box culverts (COPBOX), Parish is responsible to rate all the precast box culverts. If the Parish engineer or consultant could provide the as-built plans, DOTD may be able to provide the corresponding precast culvert rating (Rating Summary Sheet).

For concrete and metal pipes, See Bridge Design Technical Memorandum No. 79 ([BDTM. 79](#)). The rating spreadsheet is published at bridge website. District Bridge Engineers will help Parishes to measure and rate these metal pipes. There are two sets of measuring equipment available. Contact DOTD-Off-System-Rating@la.gov for these measuring equipment.

14. Load Rating of Specialized Hauling Vehicles (SHVs)

SHVs must be considered in bridge load rating and posting and posting if such vehicles are legally allowed to cross the bridges. See following for FHWA's memorandum on Load rating of Specialized Hauling Vehicles.

<https://www.fhwa.dot.gov/bridge/loadrating/131115.cfm>

https://www.fhwa.dot.gov/bridge/loadrating/shv_qa.pdf

15. What are the deadlines for off-system bridge ratings?

		Deadlines
Bridge file recovery		12/30/2017
DOTD bridge rating review		3/1/2018
All valid bridge ratings (non-culvert)		7/1/2019
SHV ratings		7/1/2019
Culverts	C-I-P Culverts	7/1/2019
	Precast Culverts	12/31/2018
	Pipes	12/31/2018
	Metal Culverts	12/31/2018